THE TOOL COMPANY

350mm CHOP SAW

■ STOCK No.55809 (110V) 52623 (230V) ■ PART No.CS14A

• INSTRUCTIONS •

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS TOOL.

CE

04/2001

GENERAL INFORMATION

This manual has been compiled by Draper Tools and is an integrated part of the power tool equipment, which should be kept with the machine.

This manual describes the purpose for which this tool has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation of the machine, before performing any kind of adjustment to the machine, and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both machine and operator safety, together with longer life of the tool itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the machine.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tool policy of continuous improvement determines the right to make modifications without prior warning.

CHOP SAW

■ STOCK No.55809 (110V). ■ PART No.CS14A
52623 (240V).

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DECLARATION OF CONFORMITY

We
Draper Tools Ltd. Hursley Road, Chandler's Ford, Eastleigh, Hampshire.
SO53 1YF. England.

Declare under our sole responsibility that the product:

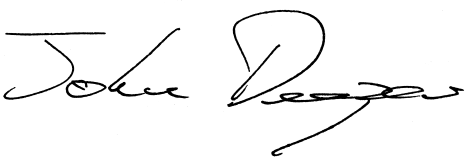
Stock Nos:- 55809 & 52623.

Part Nos:- CS14A.

Description:- CHOP SAW.

To which this declaration relates is in conformity with the following directive(s) 98/37/EC, 89/336/EEC & 73/23/EEC.

With reference to: EN55014-2:1997, EN55104:1993, EN61000-3-2:1995 & EN61000-3-3:1995.



JOHN DRAPER
Managing Director

11/02/2000

SPECIFICATION

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Part No.	CS14A	CS14A
Stock No.	55809 (110V)	52623 (230V)
Motor	1800W	1800W
Blade diameter	350mm	350mm
Blade bore	25.4mm	25.4mm
Speed	3800RPM	3100RPM
Cutting capacity:		
Rectangular	70 x 165mm	70 x 165mm
Pipe	120mm	120mm
Square	100mm	100mm
Angle iron	165 x 84mm	165 x 84mm
Weight nett/gross	20/22kg	20/22kg
Sound power level	121.9db(A)	121.9db(A)
Sound pressure level	108.9db(A)	108.9db(A)

ALWAYS WEAR GOGGLES AND EAR PROTECTION

GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone: (023) 8026 6355.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited

POWER SUPPLY

CONNECTING YOUR MACHINE TO THE POWER SUPPLY: (240V)

To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, non rewireable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced an ASTA approved BS1362 fuse must be used of the same rating, marked thus ASTA .

The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug (i.e. red). Fuse covers are available from your Draper Tools stockist.

If the fitted plug is not suitable, it should be cut off and destroyed. *The end of the cable should now be suitably prepared and the correct type of plug fitted. See below.

*WARNING:

A plug with bare flexible wires exposed is hazardous if engaged in a live power socket outlet.

WARNING THIS APPLIANCE MUST BE EARTHED. (230V):

The mains lead is coloured Green and Yellow - Earth, Blue - Neutral & Brown - Live. As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.The wire which is coloured green and yellow must be connected to the terminals in your plug marked with the letter 'E' or by the earth symbol ⏚ or coloured green or green and yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue. The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

WARNING THIS APPLIANCE MUST BE EARTHED. (110V):

The mains lead is coloured Green and Yellow - Earth, Blue - Neutral & Brown - Live. As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.The wire which is coloured green and yellow must be connected to the terminals in your plug marked with the letter 'E' or by the earth symbol ⏚ or coloured green or green and yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue. The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

EXTENSION LEAD CHART:

Extension lead sizes shown assure a voltage drop of not more than 5% at rated load of tool.

Ampere rating (on Name plate)	3	6	10	13
Extension cable length	Wire Size mm2			
7.5M	0.75	0.75	1.0	1.25
15M	0.75	0.75	1.0	1.5
22.5M	0.75	0.75	1.0	1.5
30M	0.75	0.75	1.25	1.5
45M	0.75	1.25	1.5	2.5

GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

WARNING
Please read the following instructions carefully, failure to do so could lead to serious personal injury.

IMPORTANT
Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

1. **KNOW YOUR POWER TOOL**
   Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.
2. **KEEP WORK AREA CLEAN**
   Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.
3. **AVOID DANGEROUS ENVIRONMENTS**
   Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.
4. **KEEP CHILDREN AWAY**
   All visitors should be kept a safe distance from work area.
5. **STORED TOOLS**
   When not being used, all tools should be stored in a dry, locked cupboard or out of the reach of children.
6. **WEAR PROPER CLOTHING**
   Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.
7. **USE SAFETY GOGGLES (Head Protection)**
   Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.
8. **NOISE LEVELS**
   Some types of machines may have high noise levels when working. In such cases ear protection must be worn.
9. **VIBRATION LEVELS**
   Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.
10. **DUST EXTRACTION**
    If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.
11. **PROTECT YOURSELF FROM ELECTRIC SHOCK**
    When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.
12. **STAY ALERT**
    Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.
13. **WHEN WORKING OUT OF DOORS**
    Only use extension leads designed for that purpose.
14. **ACCESS TO MAINS SOCKET**
    If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.
15. **DISCONNECT POWER TO THE TOOL**
    When not in use, before servicing and when changing accessories such as cutters, etc.
16. **AVOID ACCIDENTAL STARTING**
    Make sure the switch is in the OFF position before plugging the machine into the power supply.
17. **NEVER LEAVE MACHINE RUNNING UNATTENDED**
    Turn power off. Do not leave machine until it comes to a complete stop.
18. **DO NOT ABUSE THE CORD**
    Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges.
19. **NEVER STAND ON TOOL**
    Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool, so that it is necessary to stand on the tool to reach them.
20. **CHECK DAMAGED PARTS**
    Check for damage to parts, breakage of parts, mountings and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
21. **KEEP GUARDS IN PLACE**
    And in working order.
22. **MAINTAIN TOOLS WITH CARE**
    Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.
23. **USE RECOMMENDED ACCESSORIES**
    Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.
24. **REMOVE ADJUSTING KEYS AND WRENCHES**
    Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
25. **SECURE WORK**
    Use clamps or a vice to hold work. This frees both hands to operate the tool.
26. **DO NOT OVERREACH**
    Keep proper footing and balance at all times.
27. **USE RIGHT TOOL**
    Do not force the tool or attachment to do a job for which it was not designed.
28. **DO NOT FORCE TOOL**
    It will do the job better and safer at the rate for which it was designed.
29. **DIRECTION OF FEED**
    Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
30. **WHEN DRILLING OR SCREWING INTO WALLS**
    Always make sure there is no danger of hitting any hidden power cables, water or gas pipes in the wall.

IMPORTANT NOTE
Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution !

DRAPER
THE TOOL COMPANY

SAFETY RULES FOR CHOP SAWS

1. **WARNING:** Do not operate your abrasive cut-off saw until it is completely assembled and installed according to the instructions.

2. **IF YOU ARE NOT** thoroughly familiar with the operation of abrasive cut-off saws, obtain advice from your supervisor, instructor or other qualified person.

3. **WEAR** safety goggles, face shield, respirator, body apron, headcovering, safety shoes, long tight-fitting sleeves and gloves.

4. **USE ONLY** recommended reinforced abrasive wheels with blotters.

5. **TIGHTEN** arbor screw and all clamps before operating.

6. **MAKE SURE** spindle lock is disengaged before operating.

7. **ALWAYS** keep guards in place and working properly.

8. **KEEP** hands clear of cut-off wheel.

9. **SECURE** workpiece properly. Work should be straight and firmly clamped to avoid possible movement and pinching as the cut nears completion.

10. **NEVER** cut anything freehand.

11. **NEVER** reach behind or beneath the cut-off wheel.

12. **MAKE SURE** the wheel has come to a complete stop before removing or securing workpiece or changing workpiece angle.

13. **MAKE SURE** the inside surfaces of the wheel flanges as well as the sides of the wheel are free from any foreign matter.

14. **WHEN MOUNTING** the wheel, care should be taken to tighten the arbor screw only enough to hold the wheel firmly and to prevent wheel slippage. Excessive tightening may result in damaging the wheel and springing the wheel flanges.

15. **USE ONLY** abrasive wheels rated at 3900 RPM or higher.

16. **ALWAYS** check the wheel for cracks or other damage before operation. Replace cracked or damaged wheel immediately.

17. **USE ONLY** wheel flanges specified for your machine.

18. **MAKE SURE** abrasive wheel is not contacting workpiece before switch is turned on.

19. **ALLOW** the motor to come up to full speed before starting cut.

20. **AFTER TURNING MACHINE ON,** lower wheel lightly until it comes into contact with the workpiece and then draw wheel firmly though the cut. **DO NOT** allow the wheel to chatter and jump as this may cause the wheel to wear out of round resulting in poor cutting and possible broken wheels.

21. **ANY** material can be cut more satisfactorily when placed in position for the wheel to cut with the least arc of contact.

22. **THE NUMBER** of cuts per wheel, as well as the quality of cut, may vary considerably with the cutting time. Fast cuts cause the wheel to wear more rapidly but also help to reduce discoloration and burr. This is especially noticeable when cutting light gauge tubing. When coming through the bottom wall, with the longer arc of contact, do not slow-up but give a vigorous pull. This keeps the metal from overheating and dragging off in a heavy burr.

23. **USE** the wheel guard at all times.

24. **NEVER** operate the machine in an area with flammable liquids or gases.

25. **TO AVOID** electric shock, do not use under damp conditions or expose to rain.

26. **THIS** tool is designed for ferrous metals only. **DO NOT** attempt to cut wood, masonry, aluminium or magnesium with this tool.

27. **AFTER** installing a new wheel, never start the tool with a person in line with the wheel. **ALWAYS** run the tool for approximately one minute before cutting. If the wheel has an undetected crack or flaw, it could burst in less than one minute.

28. **DISCONNECT** from power supply before servicing or adjusting tool.

29. **SHOULD** any part of your machine be missing, damaged or fail in any way, or any electrical component fail to perform properly, shut-off switch and remove plug from power supply outlet. Replace missing, damaged or failed parts before resuming operation.

GETTING TO KNOW YOUR CHOP SAW

Fig. 1

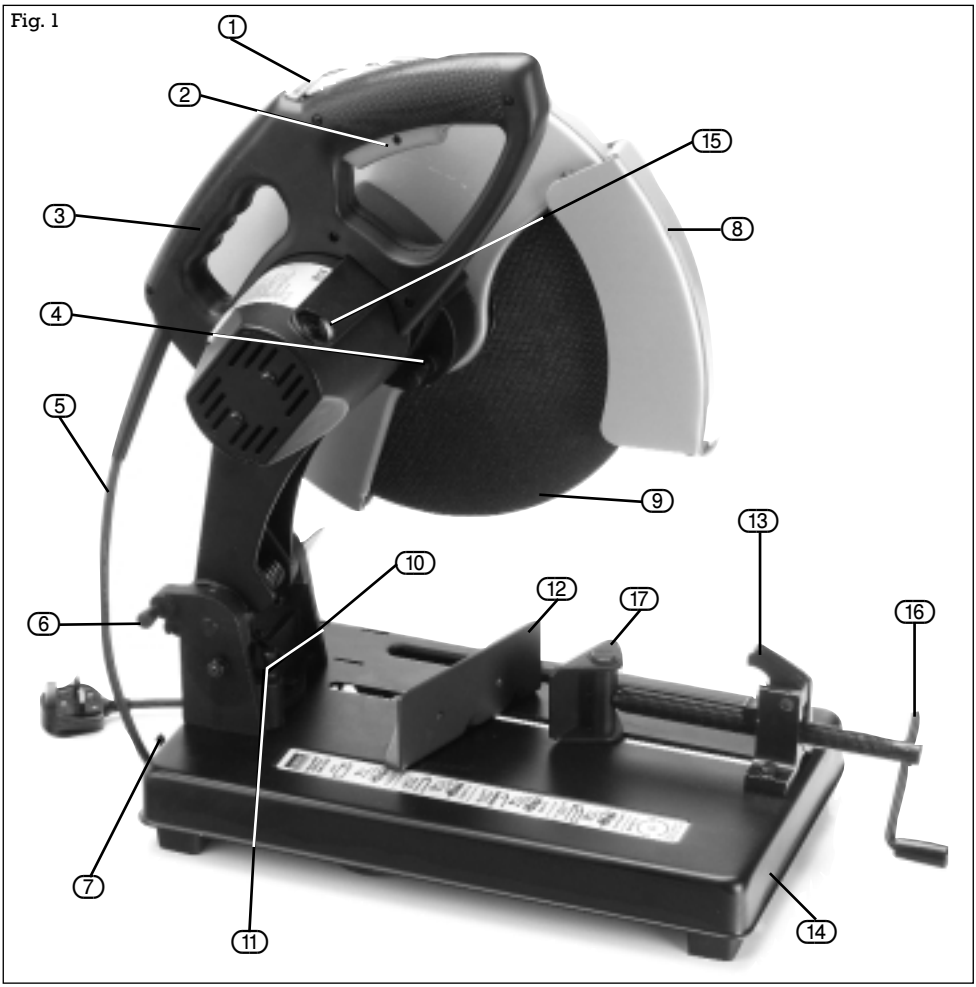


Fig. 1

1. Trigger locking button
2. Trigger
3. Transportation handle
4. Spindle lock
5. Power cord
6. Head locking pin
7. Hex wrench
8. Wheel guard
9. Abrasive wheel
10. Depth stop
11. Lock nut
12. Backstop
13. Quick release lever
14. Base
15. Brush cap
16. Clamping handle
17. Vice clamp

OPERATION & USE

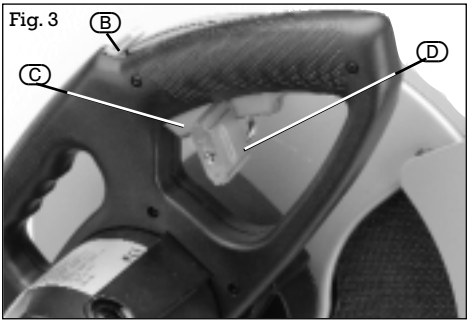
1. CUTTING HEAD LOCK (Fig.2)
When the saw is not in use the lock (A) should be used. To release pull the pin out and raise up the head. To lock in the down position, lower the head and push in pin until it engages.

Fig. 2

2. ON/OFF SWITCH (Fig.3)
To start the chop saw, press the trigger locking button (B) and press the trigger (C) simultaneously. The button (B) can be released and the saw will continue running until the trigger ie released.

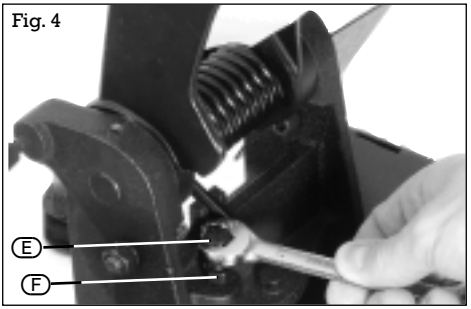
NOTE:
We suggest that when the machine is not in use. The trigger be locked in the off position using a padlock (D) (not supplied) (Draper Tools recommend Stock No. 60177).

Fig. 3



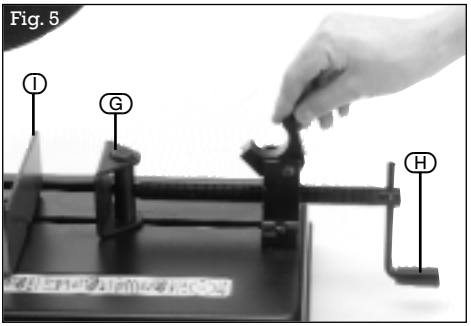
3. ADJUSTING CUTTING DEPTH (Fig 4)
For deeper cuts screw the adjusting screw (E) clockwise. For shallower cuts, screw (E) anticlockwise when set in position use locking nut (F) to secure in place.

Fig. 4



4. WORK CLAMP (Fig 5)
For quick adjustment, disengage quick release lever (G). The vice clamp (I) can now be pushed in or out to accomodate the workpiece. Engage the lever (G) and finish tightening using the clamping handle (H).

Fig. 5



OPERATION & USE

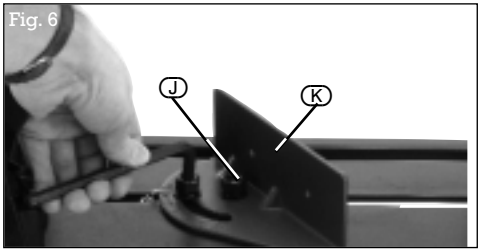
5 ANGLE CUTING GUIDE (Fig.6)

Loosen screw (J) with the hexagon wrench provided. Adjust fence (K) to the required angle and then secure with screw (J). The backstop can be adjusted backwards and forwards to meet your requirements.

This is only a guide and practice cuts should be made using a scarp piece of material first.

Before carring out any maintenance or trouble shooting operation ensure the power is off and plug is removed.

Fig. 6



6. REPLACING THE DISC (Fig 7 & 8)

With the cutting arm in an upright position press locking spindle button (L)

Using the hexagon wrench provided loosen the disc flange securing bolt (M). Remove the bolt and the outer flange (N). Swap over the cutting discs on the abbor shaft.

Refit the outer flange and tighten the locking bolt with the wrench and spindle locking button.

NOTE: Do not over tighten as this may cause damage to the cutting disc.

Fig. 7

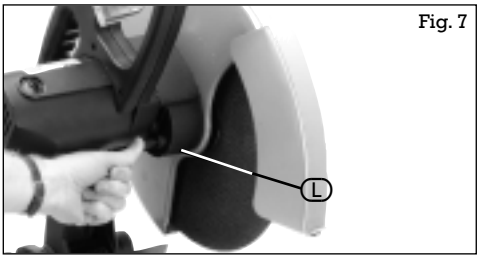
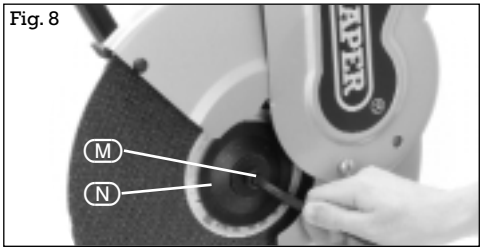


Fig. 8



BRUSH INSPECTION AND REPLACEMENT

CAUTION: Before inspecting the brushes disconnect the machine form the power supply.

BRUSH WEAR AND REPLACING BRUSHES

On new machine check for brush wear after the first 50 hours of use, then every 10 hours

Replace brushes when they have worn down to 5mm.

Unscrew brush covers (0) (Fig.9) Remove brushes Fig 10. Check for wear or replace. NOTE: When replacing brushes always replace both brushes.

Fig. 9

Fig. 10

MAINTENANCE

AFTER EACH USE:
Disconnect the plug from the power supply. Remove the disc and flanges. Wipe deposits of dust from the housing and guard. Check operation and condition of the lower guard, it should be securely attached and working properly. The cable and tool should be wiped occasionally with a clean cloth and mild soap only to prevent deterioration from oil and grease.

CAUTION:
Certain cleaning agents and solvents can damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia. Avoiding use of these and other types of cleaning agents minimizes the possibility of damage.

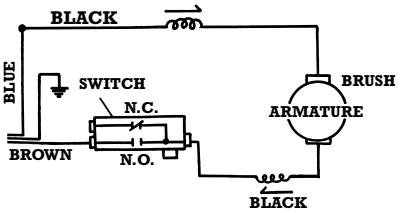
WARNING:
The use of any other accessory not specified in this manual may create a hazard.

WARNING:
Electrical or mechanical repairs should only be carried out by trained service personnel.

ACCESSORIES

Stock No.	Part No.	DESCRIPTION	UNIT OF SALE
58368	CWMF	Cut off wheel metal	1
58390	CWSF	Cut off wheel metal	1

WIRING DIAGRAM



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TROUBLESHOOTING

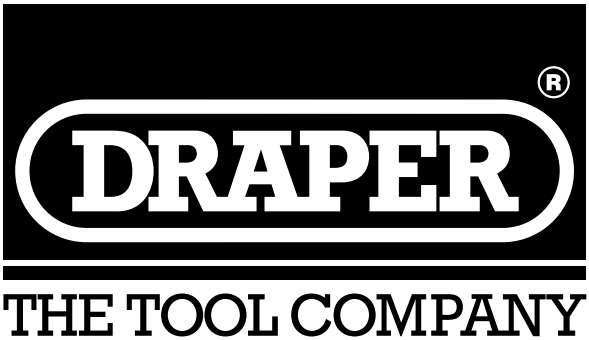
WARNING: FOR YOUR OWN SAFETY ALWAYS TURN THE MAIN SWITCH ON THE MACHINE 'OFF' AND REMOVE THE PLUG FROM THE POWER SUPPLY BEFORE CARRING OUT ANY MAINTENANCE OR TROUBLESHOOTING.

Motor

Trouble	Probable Cause	Remedy
Motor does not start.	1. Fuse. 2. Brushes warn. 3. Other.	1. 13 amp time delay fuse or circuit breaker. 2. See page 8. 3. Authorized service agent.

General

Trouble	Probable cause	Remedy
Powerhead wobbles	1. Loose pivot points	1. Check/replace worn parts
Power head will not rise fully.	1. Part failure 2. Pivot spring not replaced properly after service.	1.Authorised service agent 2.Authorised service agent
Disc binds jams	1. Improper operation 2. Warped disc.	1. See basic saw operation 2. Replace disc
Tool vibrates or shakes	1. Disc not round. 2. Disc damaged. 3. Disc loose. 4. Other	1. Replace disc 2. Replace disc 3. Tighten wheel flang securing bolt. 4. Authorised service agent.



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